

We claim

1. A dual-diameter fluid pump comprising:

an upper outer cylinder and a lower outer cylinder of different diameters, said upper cylinder having at least an input and output port;

a upper piston disposed into said upper cylinder and a lower piston disposed into said lower cylinder, said upper and lower pistons coupled together external to said cylinders;

a fluid boundary between said upper and lower pistons whereby said pistons do not physically touch;

said upper piston being rotatable to align with each of said ports;

said upper and lower pistons being moved vertically in said cylinders to aspirate and dispense fluid.

2. The fluid pump of claim 1 further comprising a taper

lock connection of said upper piston to a post, said taper lock connection comprising a threaded piston pump nut with a cylindrical nut head coupled to a threaded shaft with a tapered section, the tapered section running from an end of the threaded shaft to the cylindrical nut head, the piston pump nut running through a cylindrical cavity in an upper end of said upper piston and securing said upper piston to a piston end connection when said piston pump nut is tightened, said tapered section removing vertical error in said fluid pump.